

### **Claims**

1. Isolated polynucleotide comprising the sequence SEQ.ID.NO. 8 or one of its fragments.
2. Isolated polynucleotide according to claim 1, characterized in that it is a polynucleotide of sequence SEQ. ID. NO. 8.
3. Isolated polynucleotide according to claim 1, characterized in that it is a polynucleotide of sequence SEQ. ID. NO. 9.
4. Polynucleotide of sequence SEQ. ID. NO. 4, SEQ. ID. NO. 5, SEQ. ID. NO. 11 or SEQ. ID. NO. 12.
5. Polynucleotide of sequence SEQ. ID. NO. 13.
6. Isolated polypeptide comprising the sequence SEQ. ID. NO. 14 or one of its fragments.
7. Isolated polypeptide according to claim 6, characterized in that it is a polypeptide of sequence SEQ. ID. NO. 14.
8. Expression vector containing a polynucleotide of sequence SEQ. ID. NO. 13.
9. Host cell transformed or transfected by an expression vector according to claim 8.
10. Process for preparing an isolated polypeptide comprising the protein encoded by the polynucleotide sequence SEQ. ID. NO. 9 or SEQ. ID. NO. 13 or one of the fragments of the latter or by a sequence complementary to the polynucleotide sequence SEQ. ID. NO. 9 or one of the fragments of the latter, said isolated polypeptide having at least one immunological and/or biological activity characteristic of a protein binding human GHRH and being associated with the modulation of cell proliferation, said preparation process comprising the following successive stages:
  - (a) culture, under suitable conditions in order to obtain the expression of said polypeptide of a host cell transformed or transfected with an expression vector comprising an isolated polynucleotide comprising the polynucleotide sequence SEQ. ID. NO. 9 or SEQ. ID. NO. 13, the sequence complementary to the polynucleotide

sequence SEQ. ID. NO. 9 or SEQ. ID. NO. 13 or also one of the fragments of the latter, said isolated polypeptide having at least one immunological and/or biological activity characteristic of a protein binding human GHRH and being associated with the modulation of cell proliferation, and

5 (b) isolation of the polypeptide from the host cell cultures.

11. Antibody or antigen-binding fragment of the latter, which specifically binds the protein of sequence SEQ. ID. NO. 14 but not the protein of sequence SEQ. ID. NO. 10.

12. As medicament, a polynucleotide according to one of claims 1 to 3.

13. As medicament, a polypeptide according to claim 6 or 7.

10 14. Pharmaceutical composition comprising, as active ingredient, a polynucleotide according to one of claims 1 to 3.

15. Pharmaceutical composition comprising, as active ingredient, a polypeptide according to claim 6 or 7.

15 16. Use of a polynucleotide according to one of claims 1 to 3 for preparing a medicament intended to treat a proliferative disease.

17. Use of a polypeptide according to claim 6 or 7 for preparing a medicament intended to treat a proliferative disease.

18. Method for the identification of compounds capable of binding human GHRH and modulating cell proliferation, which comprises the following successive stages:

20 (a) bringing each candidate compound into contact with an isolated polypeptide comprising:

- either a fragment of the protein encoded by the polynucleotide sequence SEQ. ID. NO. 9 or by a sequence complementary to the polynucleotide sequence SEQ. ID. NO. 9,

25 - or a fragment of the protein encoded by the polynucleotide sequence SEQ. ID. NO. 13 or by a sequence complementary to the polynucleotide sequence SEQ. ID. NO. 13,

30 under conditions and for a time sufficient to allow the candidate agent to bind to the polypeptide, said isolated polypeptide having at least one immunological and/or biological activity characteristic of a protein binding human GHRH and being associated with the modulation of cell proliferation, and

(b) detection of the binding of each candidate compound to said polypeptide and identification, from the candidate compounds, of the compounds capable of binding human GHRH and modulating cell proliferation.